



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/825,296

04/16/2004

Yeon-ho Jin

Q79989

7766

23373 7590 12/10/2007  
SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER

GREENE, JOSEPH L

ART UNIT

PAPER NUMBER

4152

MAIL DATE

DELIVERY MODE

12/10/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/825,296	<b>Applicant(s)</b> JIN ET AL.	
	<b>Examiner</b> Joseph L. Greene	<b>Art Unit</b> 4152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04/16/2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/16/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/28/2005, 05/16/2005, 04/13/2006, 09/29/2006</u> .          | 6) <input type="checkbox"/> Other: _____                          |



### **DETAILED ACTION**

1. Claims 1 – 17 are pending in the application.

#### ***Claim Objections***

2. Claims 3, 5, 10, 13, and 16 are objected to for containing a lack of an antecedent basis.

(a) Claim 3 recites the limitation “the respective information sources” in line 2.

(b) Claim 5 recites the limitation “the information sources” in line 2.

(c) Claim 10 recites the limitations “the network” and “the home-state information” in lines 3 and 5 (respectively).

(d) Claim 13 recites the limitation “the home devices” in line 6.

(e) Claim 16 recites the limitations “the generated information” and “the analyzed information” in line 11.

#### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

5. With respect to claim 1, it is directed to method for constructing non-functional data structure without physical transformation for achieving a practical application or useful and tangible result. The claim is directed to patent non-eligible subject matter.

6. As for claims 10 and 16, they are directed to software instructions which are not one of the statutory category subject matters.

7. As for claim 14, it is directed to an abstract idea which do not achieve a practical application, and storage of non-functional descriptive material, which lacks the requirement for a useful and tangible result.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**10. Claims 1 and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Gonzales et al. (Pre-Grant Publication No US 2003/0074088 A1) hereinafter Gonzales.**

11. With respect to claim 1, Gonzales discloses a method of constructing home-state information in a home network (abstract), comprising: a) constructing a home-state set using home-state information sources ([0004], lines 1-6); b) constructing home-state objects which are specific instances of the home-state set ([0004], lines 1-6; [0010], lines 1-11); and c) constructing home-state properties expressing properties of the home-state objects ([0004], lines 1-6; [0010], lines 1-11; It is inherent that objects contain properties that allow another to interact with them).

12. With respect to claim 16, Gonzales discloses a system for utilizing home-state information, comprising: an information collecting module operable to collect information from various information sources in a network; a home-state generating module operable to process the collected information to generate home-state information; a home-state analyzing module operable to analyze the generated home-state information depending on home-state properties ([0004], lines 1-6; [0010], lines 1-11; this sections discusses the operations of the device. It is inherent that in order to provide the service, it will need to generate the information that will provide the actual service); a home-state storing module operable to store the information generated by the home-state generating module and information analyzed by the home-state analyzing module ([0010], lines 27-33); one or more applications operable to control a predetermined home device using the generated information or the analyzed information; and an Application Programming Interface (API) operable to transmit the information generated by the home-state generating module and the information analyzed by the home-state

analyzing module to the applications ([0010], lines 6-10).

13. As for claim 17, Gonzales discloses wherein the one or more applications are constructed so that transmission or reception of home-state information there between is performed using Meta data for the information generated by the home-state generating module and the information analyzed by the home-state analyzing module (it is inherent that data transfer practices will use meta data in modern computer systems).

14. **Claims 2-11 and 13-14 are rejected as being unpatentable over Gonzales in view of Maxson et al. (Pre-Grant Publication No. US 2002/0171762 A1) hereinafter Maxson.**

15. As for claim 2, Gonzales doesn't teach wherein the home-state set comprises common profiles of the information sources. However, Maxson does teach such a system ([0047], lines 10-19). It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of Gonzales in order to utilize common profiles for information sources, as taught by Maxson, in order to have a properly functioning interface system that maintains representations of various devices.

16. As for claim 3, it is rejected for the same reasons as claim 2. In addition, Maxson teaches wherein operation a) comprises, a1) constructing unique profiles of the respective information sources ([0054], lines 7-9, 17-20, and 28-32).

17. As for claim 4, it is rejected for the same reasons as claim 3. In addition, Gonzales teaches constructing external home service profiles ([0037], lines 13-15; [0038], lines 5-7), but Gonzales doesn't teach wherein operation a1) comprises, constructing home device profiles. However, Maxson does teach such a system ([0054], lines 7-9, 17-20, and 28-32). It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of Gonzales in order to utilize profiles of home devices, as taught by Maxson, in order to have a properly functioning interface system that maintains representations of the various home devices.

18. As for claim 5, it is rejected for the same reasons as claim 2. In addition, Gonzales teaches setting rules for information source objects which form profiles of the information sources and a combination thereof, the rules being applied to a specific home-state object ([0004], lines 1-6).

19. As for claim 6, it is rejected for the same reasons as claim 5. In addition, Gonzales teaches wherein the rules are personally defined by a home user ([0010], lines 1-6).



20. As for claim 7, it is rejected for the same reasons as claim 5. In addition, Gonzales teaches wherein the rules are provided from an external home service provider ([0037], lines 13-15; [0038], lines 5-7).

21. As for claim 8, Gonzales teaches the home-state set ([0004], lines 1-6), the home-state objects ([0004], lines 1-6; [0010], lines 1-11) and the home-state properties ([0004], lines 1-6; [0010], lines 1-11; It is inherent that objects contain properties that allow another to interact with them, but Gonzales doesn't teach combining a user interface with the home-state information. However, Maxson does teach such a system (abstract, lines 12-15). It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of Gonzales in order to utilize a user interface, as taught by Maxson, in order to accurately and efficiently manage a user interactive system.

22. As for claim 9, it is rejected for the same reason as claim 8. In addition, Gonzales teaches combining an Application Programming Interface (API) with the home-state information to enable the constructed home-state information to be accessed from an external application ([0010], lines 6-10; the SPI mentioned in the prior art represents the API of the system).

23. With respect to claim 10, Gonzales teaches a home-state generating module operable to process information to generate home-state information; a home-state

Art Unit: 4152

analyzing module operable to analyze generated home-state information depending on home-state properties ([0004], lines 1-6; [0010], lines 1-11; this sections discusses the operations of the device. It is inherent that in order to provide the service, it will need to generate the information that will provide the actual service); and a home-state storing module operable to store the information generated by the home-state generating module and information analyzed by the home-state analyzing module ([0010], lines 27-33).

Gonzales, however, doesn't teach a home agent device comprising: an information collecting module operable to collect information from various information sources in the network. On the other hand, Maxson does teach such a device ([0008], lines 8-16; the mentioned PDCU is a device designed to collect and process information from other connected devices). It would have been obvious to person of ordinary skill in the art at the time of the invention to modify the teachings of Gonzales to combine a device collection and processing unit, as taught by Maxson, into ones system. Doing so increases the efficiency and modification ability of the system.

24. As for claim 11, it is rejected for the same reasons as claim 10. In addition, a Maxson teaches wherein the home agent device is implemented by a separate device or mounted on a gateway, to collect information from information sources in a network and construct home-state information using the collected information ([0008], lines 8-16).

25. As for claim 13, it is rejected for the same reasons as claim 11. In addition, Gonzales teaches wherein the information collecting module comprises: a device information collecting module operable to collect information of home devices ([0004], lines 1-6; [0010], lines 1-11; this sections discusses the operations of the device. It is inherent that in order to provide the service, it will need to generate the information that will provide the actual service); a user information collecting module operable to collect information of home users ([0098], lines 9-18; information is collected in order to program the device); an external home service information collecting module operable to collect information of an operation between the home devices and an external home service or an operation between the home users and another external home service; a home application information collecting module operable to collect information of home applications or contents included in a home server ([0037], lines 13-15; [0038], lines 5-7).

Gonzales doesn't teach a home agent information collecting module operable to collect information of the home agent device itself. However, Maxson does teach such a device ([0008], lines 8-16; the mentioned PDCU is a device designed to collect and process information from other connected devices).

26. With respect to claim 14, Gonzales teaches collecting information through an information collecting module; processing the collected information to generate home-state information; analyzing the generated home-state information ([0004], lines 1-6; [0010], lines 1-11; this sections discusses the operations of the device. It is inherent that

Art Unit: 4152

in order to provide the service, it will need to generate the information that will provide the actual service); and storing the generated home-state information ([0010], lines 27-33), but Gonzales doesn't teach using a home agent. However Maxson does teach using a home agent ([0008], lines 8-16; the mentioned PDCU is a device designed to collect and process information from other connected devices). It would have been obvious to person of ordinary skill in the art at the time of the invention to modify the teachings of Gonzales to combine a device collection and processing unit, as taught by Maxson, into ones system. Doing so increases the efficiency and modification ability of the system.

**27. Claims 12 and 15 are rejected as being unpatentable over Gonzales in view Maxson as applied to claims 10, 11, and 14, and in further view of official notice.**

28. As for claim 12, it is rejected on the same basis as claim 11. In addition, examiner takes official notice that an event generating module operable to announce an event outside of a home depending on results analyzed by the home-state analyzing module is well known and expected in the art of common burglar alarm computer system. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of Gonzales in order to combine event communicating practices found in many alarm systems in order to provide more features to event based computer system.

29. As for claim 15, it is rejected on the same basis as claim 14. In addition, examiner takes official notice that announcing an event outside of a home by analyzing the home-state information is well known and expected in the art in a common burglar alarm computer system. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of Gonzales in order to combine event communicating practices found in many alarm systems in order to provide more features to event based computer system.

### ***Conclusion***

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Greene whose telephone number is (571) 270-3730. The examiner can normally be reached on Monday - Thursday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nabil El-Hady can be reached on (571) 272-3963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4152

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLG

/Nabil El-Hady/  
Supervisory Patent Examiner, Art Unit 4152